SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai - 600 044. B.Sc.Physics - END SEMESTER EXAMINATIONS - NOV'2024 SEMESTER - II 22UPHAT2002 - Chemistry for Physics - II

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. Discuss the Carnot's cycle.
- 2. Outline the synthesis and applications of Buna-N and Buna-S.
- 3. Justify the properties of sucrose and inversion of cane sugar.
- 4. Enumerate the types of RNA and give its functions.
- 5. Predict the methods to control corrosion by internal means.
- 6. Illustrate the synthesis and application of Thermosetting plastics.
- 7. Discuss about open-chain structure of glucose and fructose.
- 8. Diffrentiate DNA and RNA.

Section C

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. Discuss the illustration and applications Hess's law.
- 10. Recommend the methods to prevent external corrosion.
- 11. Elaborate the preparation and applications of the following polymers(i) Polyvinyl Chloride (ii) Nylon
- 12. Analyse the properties of glucose and fructose.
- 13. Examine the replication, translation and transcription of DNA.
